Product Operation Manual

MSH-RD080PTW IR Middle Speed P/T IP Camera

Microseven Systems, Inc.

Walnut, California 91789, USA

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Microseven Systems, Inc.

675 Brea Canyon Road, Suite 12
Walnut, California, USA

TEL	*(909) 598 – 8553*
FAX	*(909) 598 – 1415*
Email	*support@microseven.com*
Website	*www.microseven.com*

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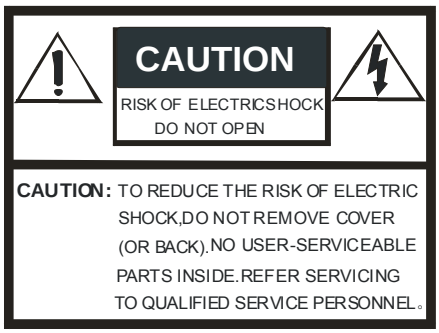
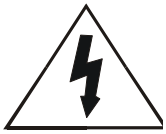
Notes:

Please read the following label before connecting or operating the equipment.

VER:1.0



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of exposed wiring within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to people.

The serial number of this product can be found on the top of the unit. Please note the serial number of this unit in the space provide and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model: _____

Product №: _____

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Contents

1. Preface 5

2. Key Features 5

3. Notes 6

4. Instructions of Main Parts 7

5. Connections 8

6. Camera Operation Instruction 10

7. Installation 10

8. Basic System Diagram and Operating Circumstance 12

9. Specification 12

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1. Preface

MSH-RD080PTW IR Middle Speed P/T IP Camera adopts SONY CCD, with bright and exquisite images. As video & audio multi-media equipment that based on network transmission, which adopts built-in and multi-media communication technology, the camera is a multi-media network terminal that can directly connect to the network.

The camera adopts all-built-in technology, which can be connected to the TCP/IP network without any other equipment and realize the video & audio collection, code compression and transmission function. Outstanding H.264 compression code arithmetic guarantees the minimum occupation of bandwidth, and built-in Web Server enables users to visit the IP camera through IE or special surveillance management software.

Furthermore, the camera adopts big body design, which not only makes it have good appearance, but also guarantees the reliable running of the camera.

2. Key Features

- Minimum Illumination: 0.5Lux
- Horizontal resolutions: 480TVL
- H.264 compression format can optimize the image quality and the bandwidth occupation.
- Realize NTSC/PAL switch.
- Dual-channel output for analog & digital signal.
- Built in web server, can be viewed directly by IE.
- E-mail and FTP network linkage alarm.
- Built in Linux operation system.
- Built in SD card storage (SD card not included).
- Can be equipped with wireless transmission module to provide IEEE 802.11b/g standard wireless transmission, and to improve the flexibility of installation.

Other Features

- Powerful software function: provide network video server hardware as well as total software solution.
- Unique video decoding function: can decode the data package of network camera to composite video signal, and display it on monitors.
- Flexible visit mode: one end to multi-end, multi-end to one end.
- Motion detection alarm, I/O status alarm and LOGO update alarm function, with 12x16 detecting areas& 9 level sensitivity ;When the moving objects are discovered in set areas, an alarm signal will be transmitted to appointed client-end through network, image capturing & recording or other relevant actions can be set.
- Digital matrix function: can realize common analog matrix functions like switch & setup auto switch time etc. Special keyboard can be directly connected to the network, controlled speed domes and switched images.

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- Built in multi network protocol: Support TCP/IP protocol, allow data sending and receiving by WAN or LAN.
- Intercom function, can realize site to remote client-end intercom by audio I/O of network camera.
- Unique video decoding function: can decode the IP video data to composite video signal, and display it on monitors
- Can get high quality black/white image in low illumination
- Pan range: 355°, tilt range: 90°
- Provide SDK interface to realize multi-system integration, easy for second development for more functions.
- Supports dual-stream, can select different saving code ratio and remote transmit ratio according to demand.

3. Notes

A. Do not attempt to disassemble the camera yourself.

   To prevent electric shock, do not remove screws or covers. No part inside should be repaired by inexperienced users. Ask a qualified service person for serving.

B. Handle the camera with care.

   Avoid striking or shaking. The camera could be damaged by improper handling or storage.

C. Do not expose the camera to rain or moisture.

   If rain or moisture, turn the power off immediately and ask a qualified service person for servicing. Moisture can damage the camera and also create the danger of electric shock.

D. Do not use strong or abrasive detergents when cleaning the camera body. Use a dry soft cloth to clean the camera when dirty. In case the dirt is hard to remove, use a mild detergent and wipe gently.

E. Pay great attention to the CCD faceplate cleaning

   Do not clean the CCD with strong or abrasive detergents. Use lens tissue or a cotton tipped applicator and ethanol.

F. Never face the camera towards the sun.

   Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other very bright objects. Otherwise, blooming or smear maybe caused.

G. Do not operate the camera beyond the specified temperature, humidity or power source.

   Use the camera under conditions where temperature is between -10° - + 50° and humidity is below 95%.

H. The power supply for MSH-RD080PTW is DC12V.

   The adapter with electric current of over 2A is recommended.

I. The pictures in the manual are for reference.

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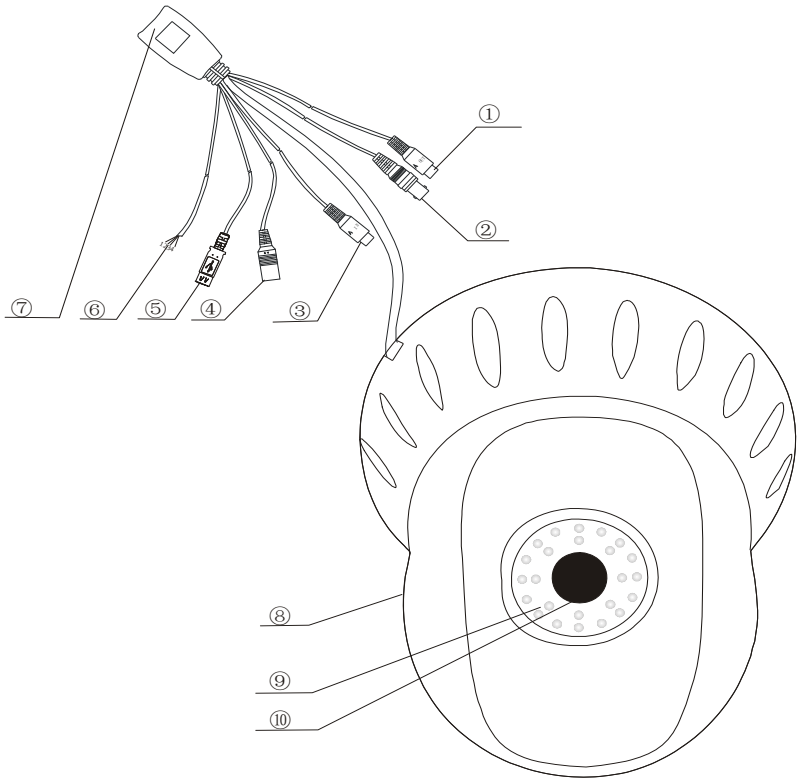
4. Instructions for Main Parts



① Audio out put terminal (yellow)

② Video output terminal

③ Audio input terminal (black)

④ Power Supply Connector

DC 12V power supply connector (please connect according to the marked polarity.)

⑤ USB Port

⑥ Alarm input/output cable

⑦ RJ45 network connector

⑧ Dome body

⑨ IR LED board

⑩ Lens

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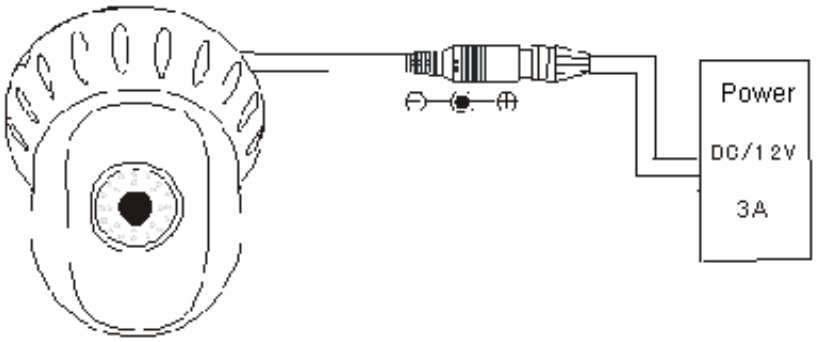
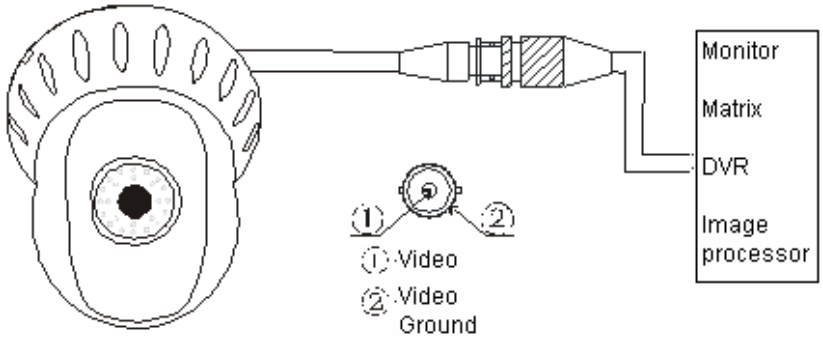
5. Connections

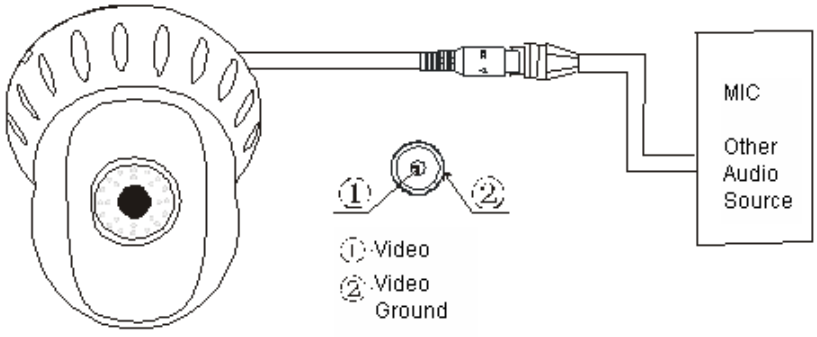
5.1 Power terminal connections



5.2 Video output terminal connection



5.3 Audio input terminal connection



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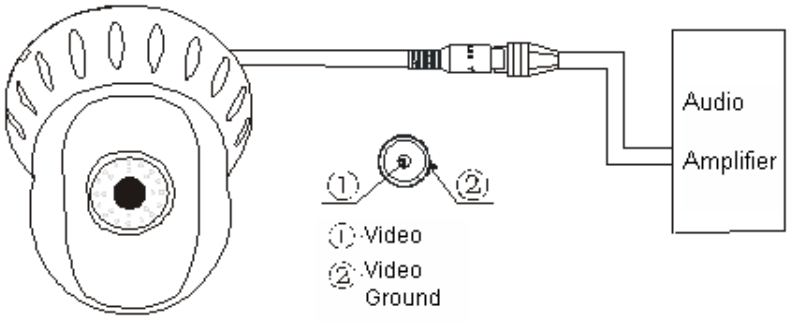
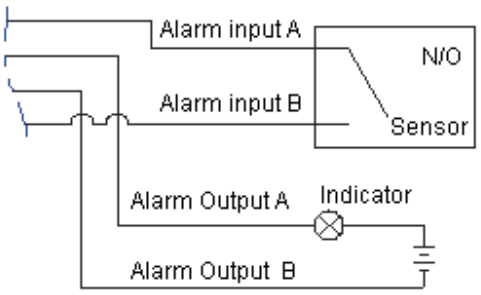
5.4 Audio output terminal connection



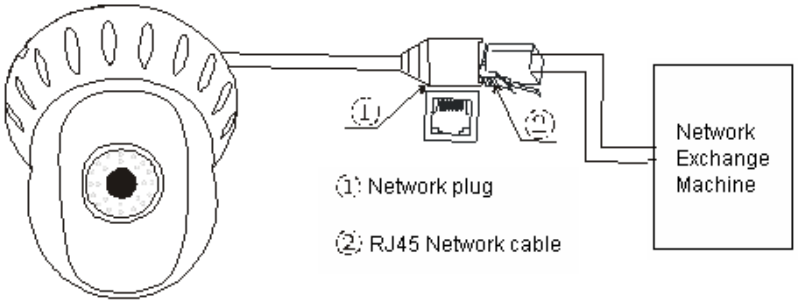
5.5 Audio output terminal connection



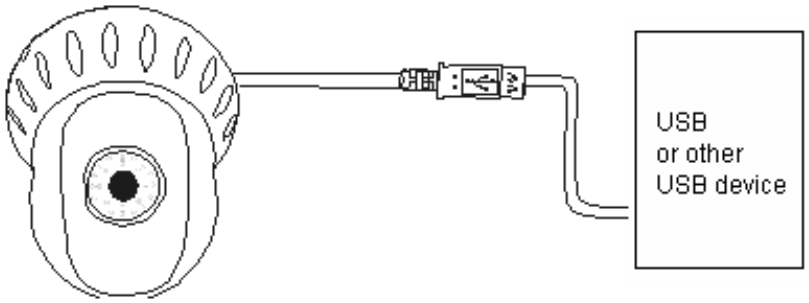
4 Alarm Lines

- alarm input A
- alarm input B
- alarm output A
- alarm output B

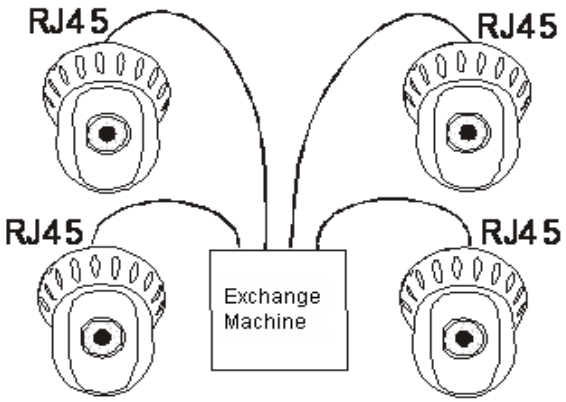
5.6 Network socket terminal connection



5.7 USB interface connector



5.8 Audio output terminal connection



- 8PIN standard GM line
- Ultra-five
- Recommended maximum length: 80m

6. Camera Operation Instruction

5.1 PTZ operation

Users can use control the PTZ by client software to realize “up, down, left, right” movements to track moving targets or mobile video images.

5.1 PTZ auto scan operation

Auto scan function is a continuous action of 355 ° even speed when the lens is on a fixed status.

a. Make sure that the other action of the PTZ should be stopped before activate the “Auto Scan” operation.

b. Click the button “

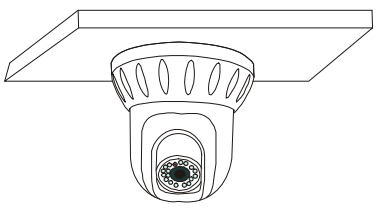
“ to activate this function.

c. During PTZ “Auto Scan” operation, double-click the button to stop scanning.

7. Installation

☞ **The following installation should be undertaken by qualified service personnel or system installers.**

☞ **The following installation method is indoor hoisting.**



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☞ **Ask an expert about the bearing capability and structure of the installation surface, if the surface is not solid enough, the camera may drop down. To get the weight of camera please refer to the product specification.**

7.1 Fix the screws

Get the fixed screws to fix the pedestals onto the installing surface, with back side upward and front side downward.

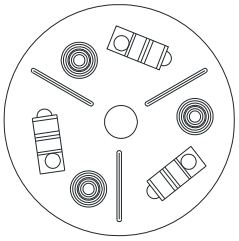

Fig.1 A Pedestal (back side)

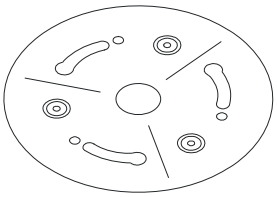

Fig.2 B Pedestal (front side)

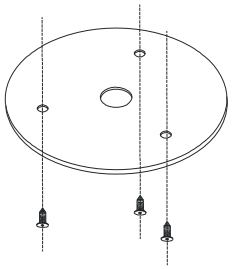

Fig.3 Install Pedestal

7.2 Install cameras

Aim the screw remaining outside part into the hole of the camera, twist the camera clockwise to the end.

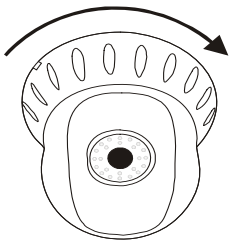

Fig. 4 camera installation

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8. Basic System Diagram and Operating Circumstance

Operating environment

After the equipment installed and connected to the network, it should be operated on Server Software Platform of Microseven Digital Video Server.

9. Specifications

Model	MSH-RD080PTW
Pick-up Device	1/3″ SONY Super HAD CCD
Scanning Area	4.89mm (H) × 3.67mm (V)
Pixels	795(H)×597(V)PAL 768(H)×494(V) NTSC
Horizontal Resolution	480 Lines
Minimum Illumination	0.5Lux (Color); 0Lux (Black/white, IR on)
Scanning	625 Lines/50 Fields/25 Frame(PAL) 525 Lines/60 Fields/30 Frame(NTSC)
Scanning Mode	Interline scanning
Video Output	1.0V[p-p] Composite Video Signal/75Ω,
Image / Audio Compression Standard	H.264 / G.711
S/N Ration	≥ 48dB (AGC OFF, Weight On)
AGC	≥ 18dB
ELC	1/120S
Synchronization Mode	Internal/Power supply synchronization selectable
Lens	4mm/6mm/8mm optional
F Coefficient	F2.0/2.5
Pan Range	20° - 355°
Tilt Range	0° - 90°
Pan/Tilt Speed	12°/s (Pan) 10°/s (Tilt)

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Basic Function	UP, down, left, right and auto pan/tilt
IR night vision distance	Max. 20m
LED	IR wavelength 850mm, φ5 x 24 pcs
Resolution	QCIF: 176 * 144 (PAL), 176*120 (NTSC) CIF: 352 * 288 (PAL), 352*240 (NTSC) H-D1: 720 x 288 (PAL), 360*480 (NTSC) D1: 720 x 576 (PAL), 720*480 (NTSC)
Frame Rate	25 fps (PAL), 30 fps (NTSC)
Bit Stream	100 Kbps - 3 Mbps, CBR/VBR adjustable
Network Interface	1 RJ-45, 10M/100M self-adjustable
Network Protocol	TCP/IP, UDP/IP, HTTP, FTP, ICMP, Telnet, IGMP, PPPOE, DDNS, DNS, DHCP
Network Time Check	Provide the interface for network clock check
Equipment Search	Support equipment searching by Ethernet broadcasting
Built-in Watchdog	Timing detection of chips & software work status, auto system reset
Remote Reposition	Realize remote reposition through network
Audio Input	1 channel, RCA interface, single track
Compressed Code Rate	32Kps
Wireless Function	IEEE 802.11b/g wireless module
Built-in Storage	SD card built-in storage
Temperature/Humidity	- 10°C - +50°C, ≤ 95%
Power Supply	DC 12V, 2A
Dimensions/Weight (with lens)	Φ6.6 in X 6.3 in (H) / 1.9 lb.

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